

Fig 1 lists the Typical Minimum Acceptable Bit Error Rates.

**Bit Error Rate and Error Correction Criteria:**

Typical Minimum Acceptable Bit Error Rate

Video:  $10^{-5}$  *BER*

Audio:  $10^{-3}$  *BER*

Data:  $10^{-10}$  *BER*

**Fig 1**

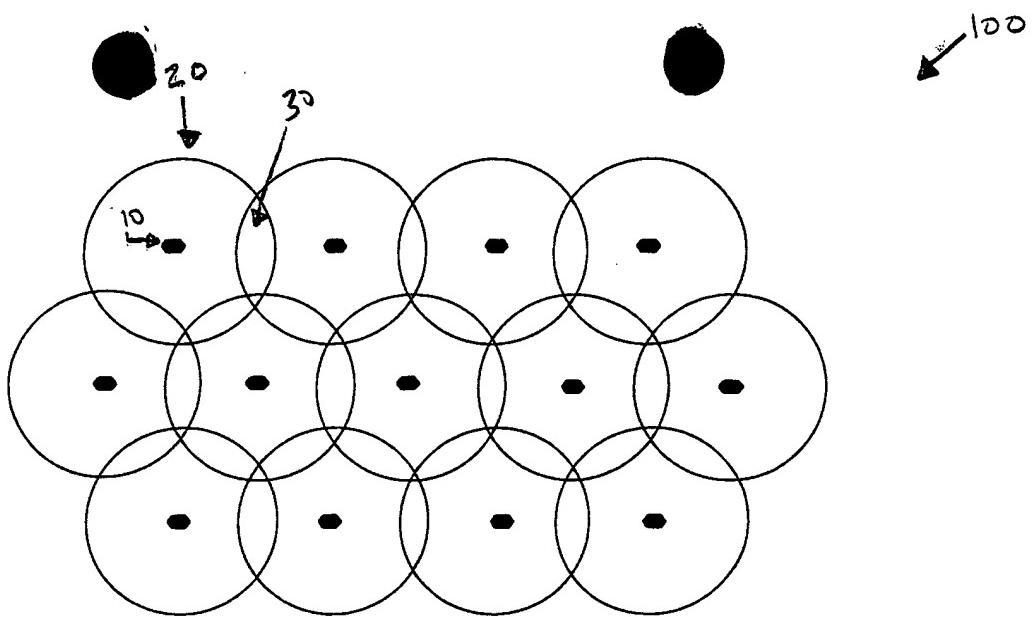


Fig 2 - Base Station Architecture  
(showing overlapping coverage)

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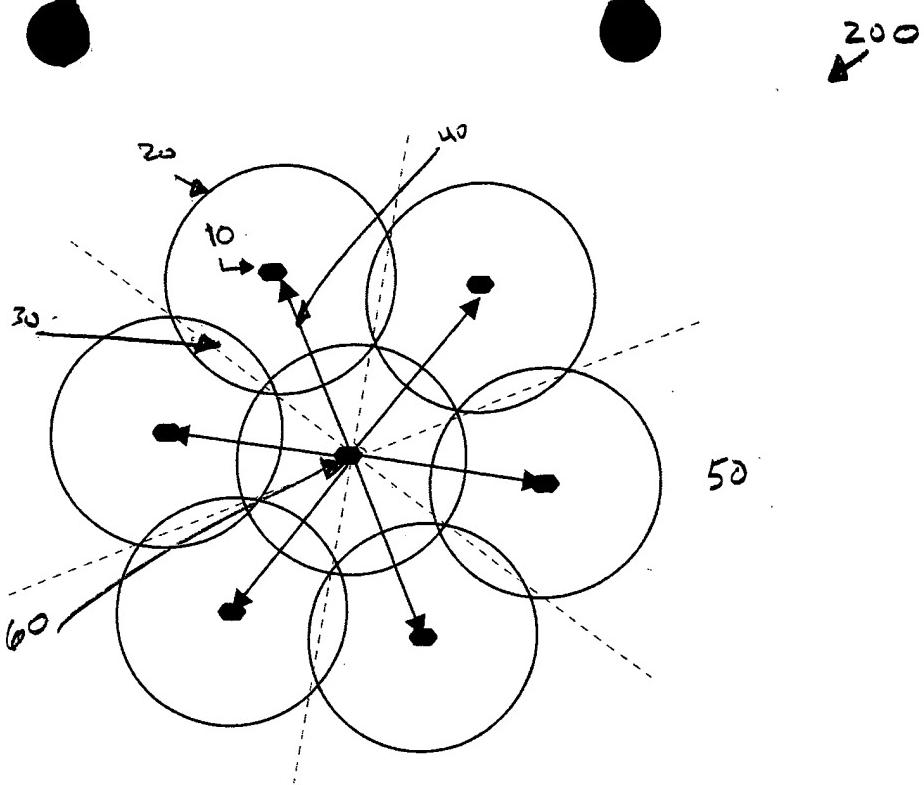


Fig 3 - Single Base Station (showing connectivity to six other Base Stations for handoff and channel co-ordination)

As a Mobile Unit  
passes from one  
Sector to another, the  
Base Station will  
initiate a "soft handoff"  
for the channel  
change

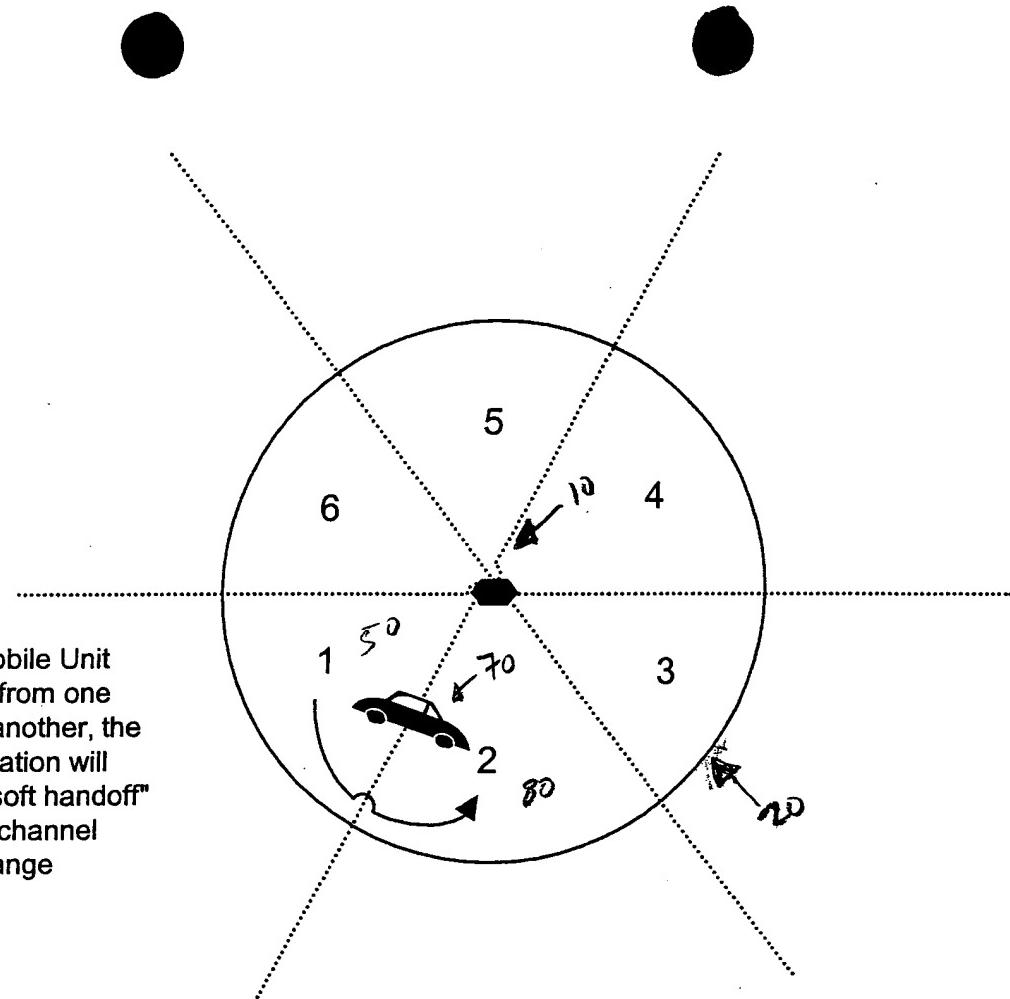


Fig 4 - Sectorization at UWB Base Station

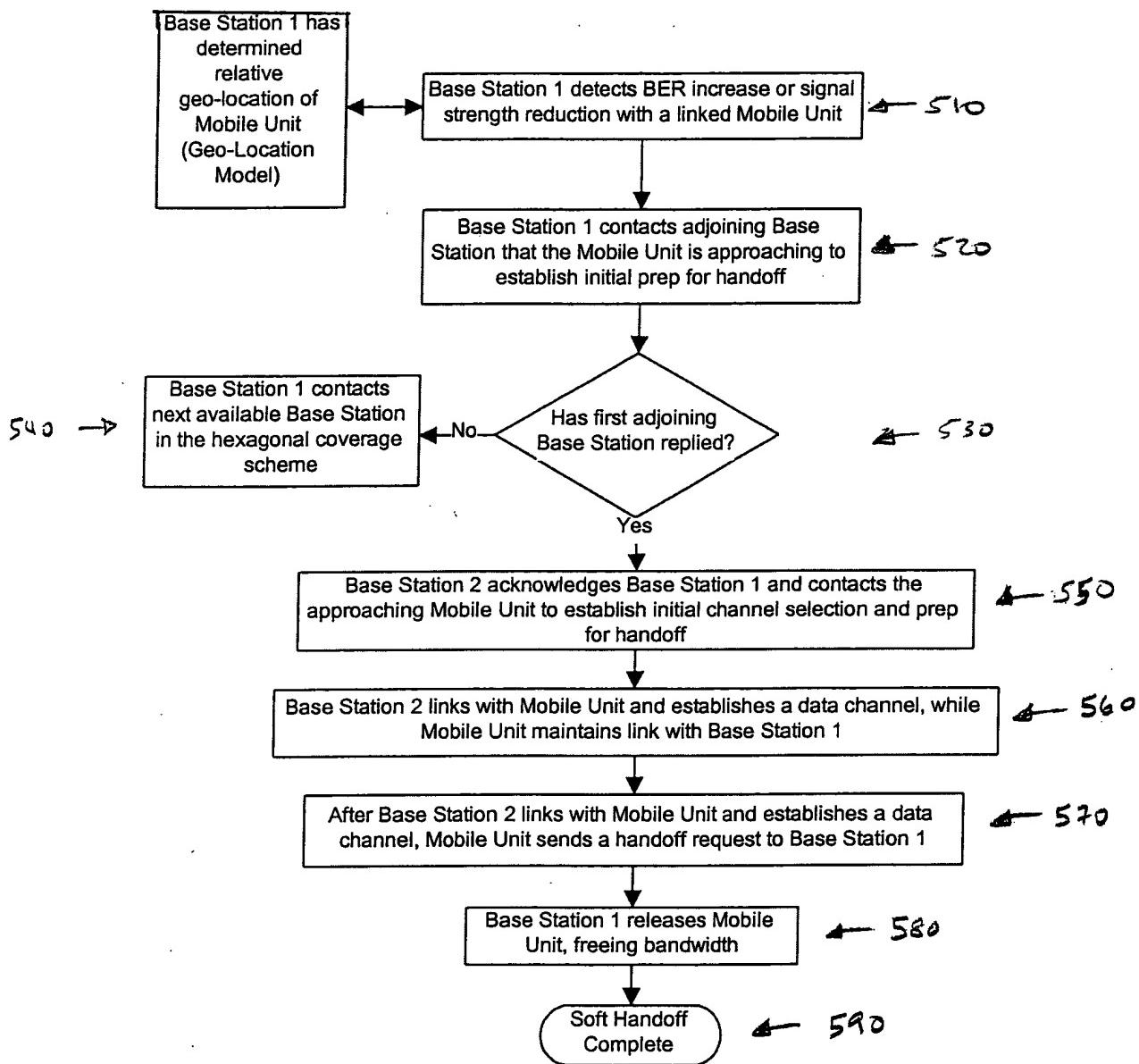


Fig 5 - Soft Handoff Scenario #1: Base Station to New Base Station to Mobile Unit

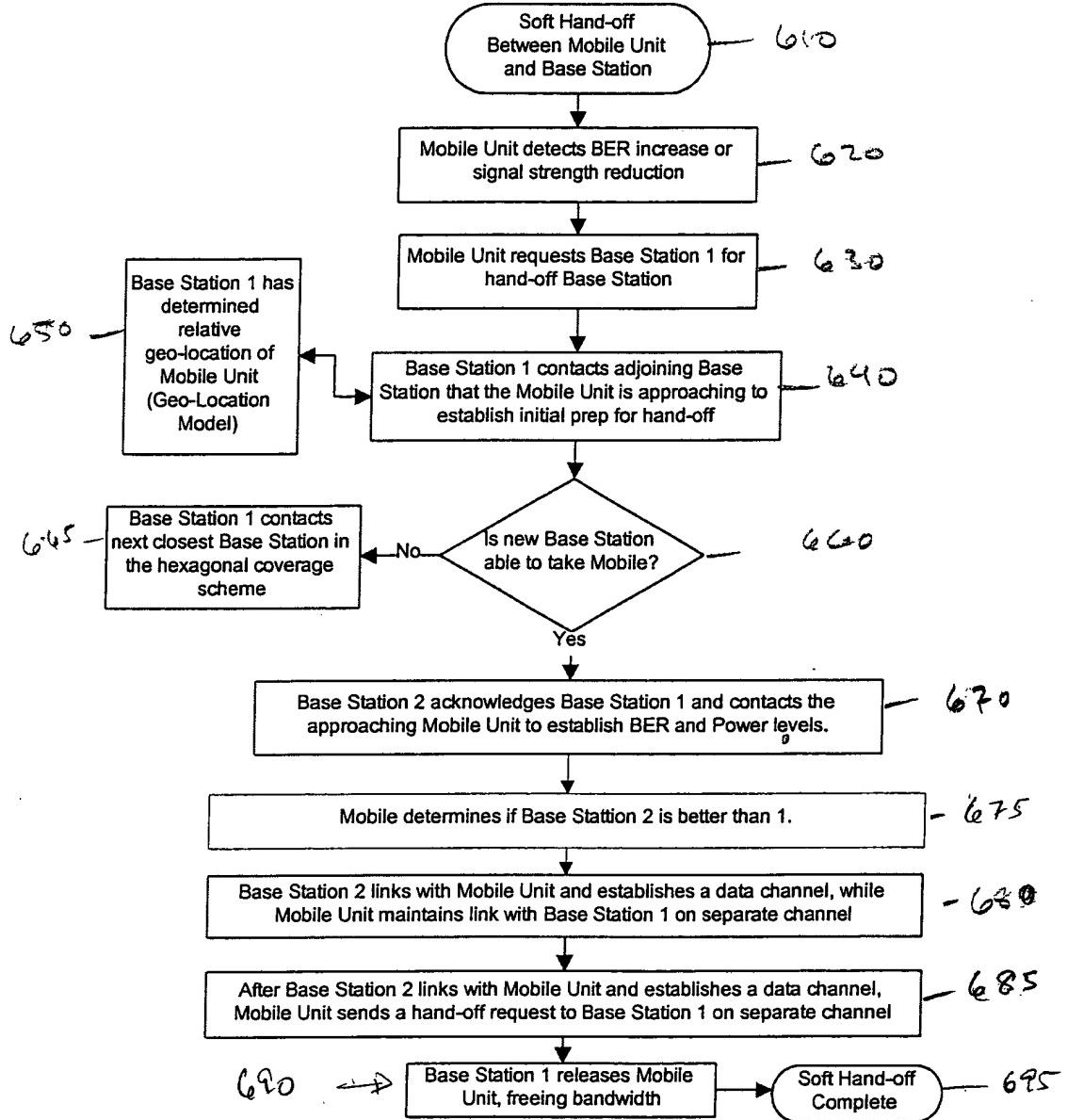


Fig 6 - Soft Hand-off Scenario #2: Mobile Unit to Base Station to New Base Station

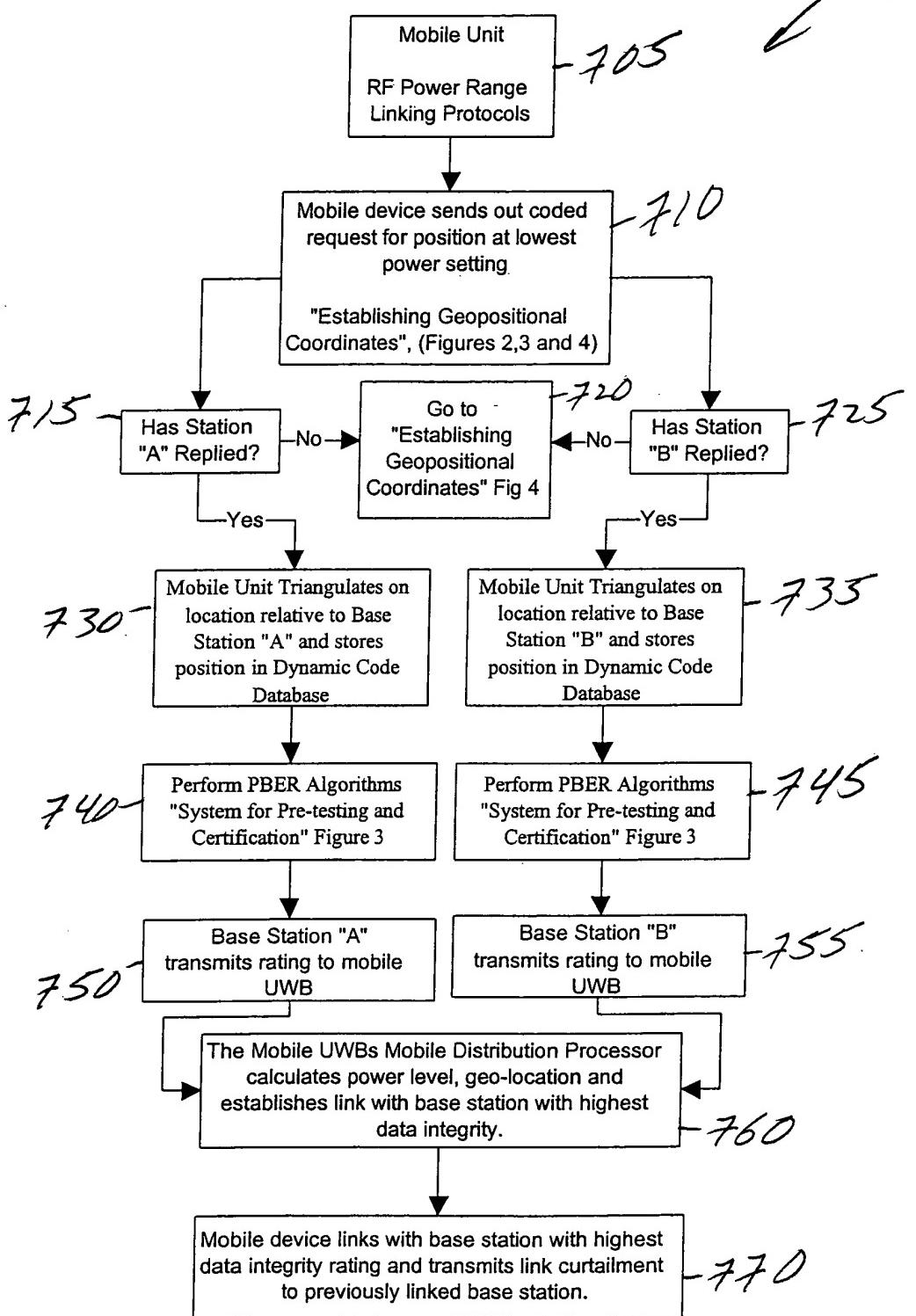
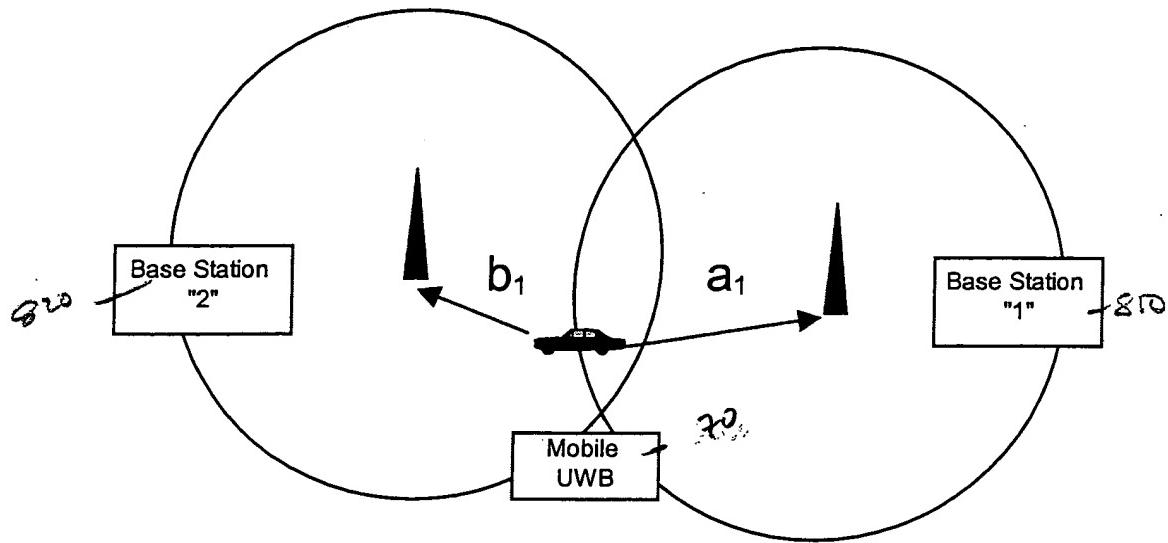


Fig 7 - Soft Hand-off Scenario #3: Performs Dynamic Power Range Linking



Mobile UWB is leaving range of Base  
 Station "1" and is now within the range of  
 Base Station "2"  
 (Transmission distances are indicated by  $a_1$   
 and  $b_1$ )

**Fig 8 - Power-Range Linking Model for soft hand-off**  
**(Mobile leaving coverage of Base Station "2")**

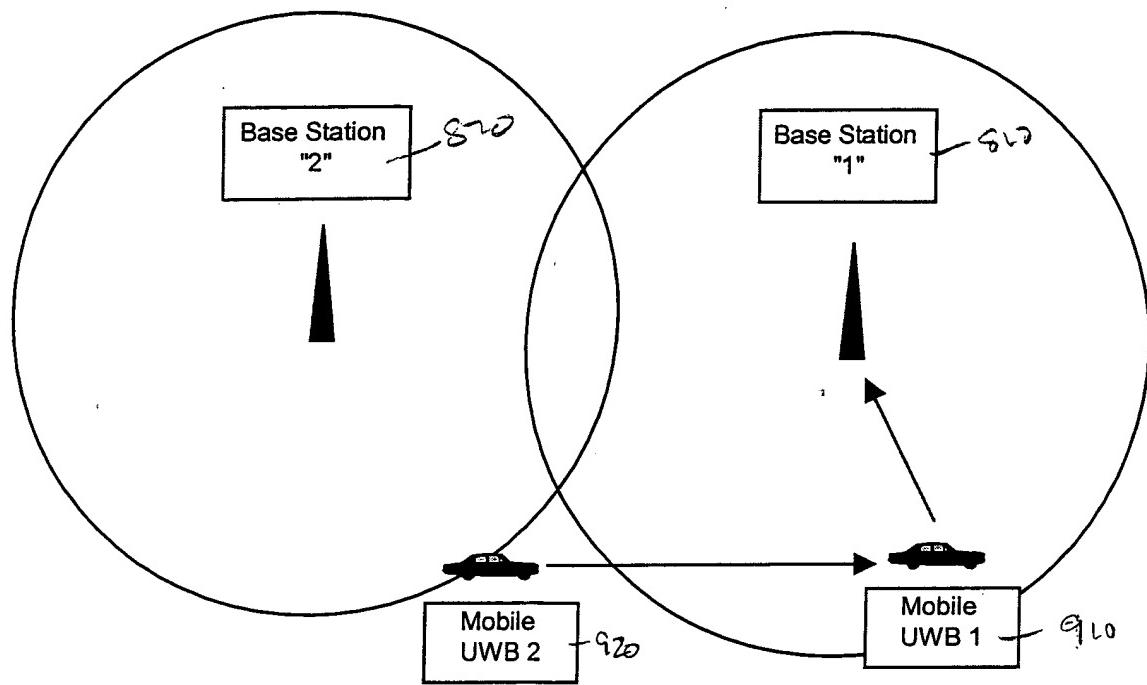


Fig 9 - Soft Hand-off Scenario #4 (Mobile Unit to Mobile Unit to Base Station, also providing emergency geo-locationing)

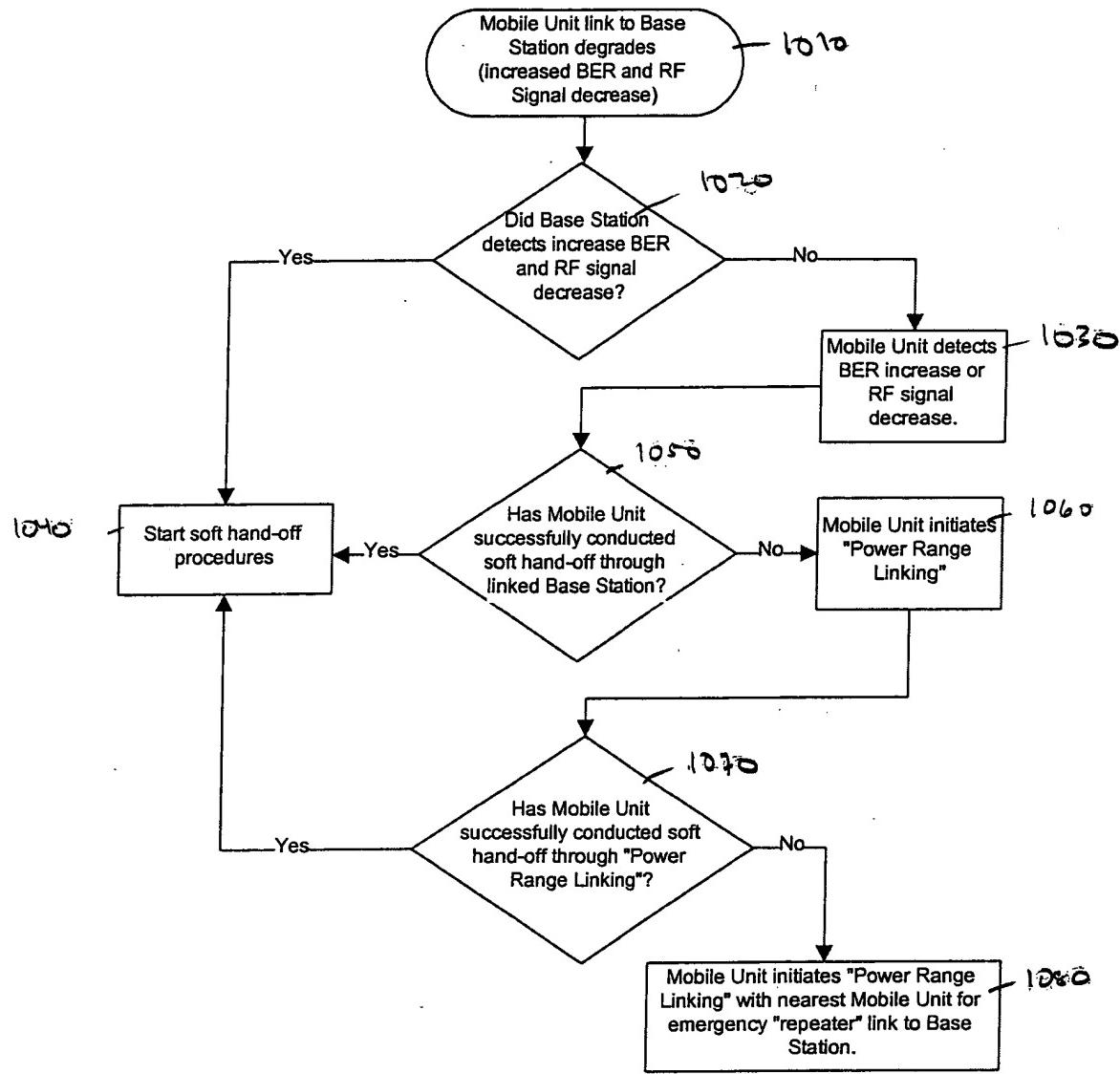


Fig 10 - Soft Hand-off procedures for Scenarios 1 through 4

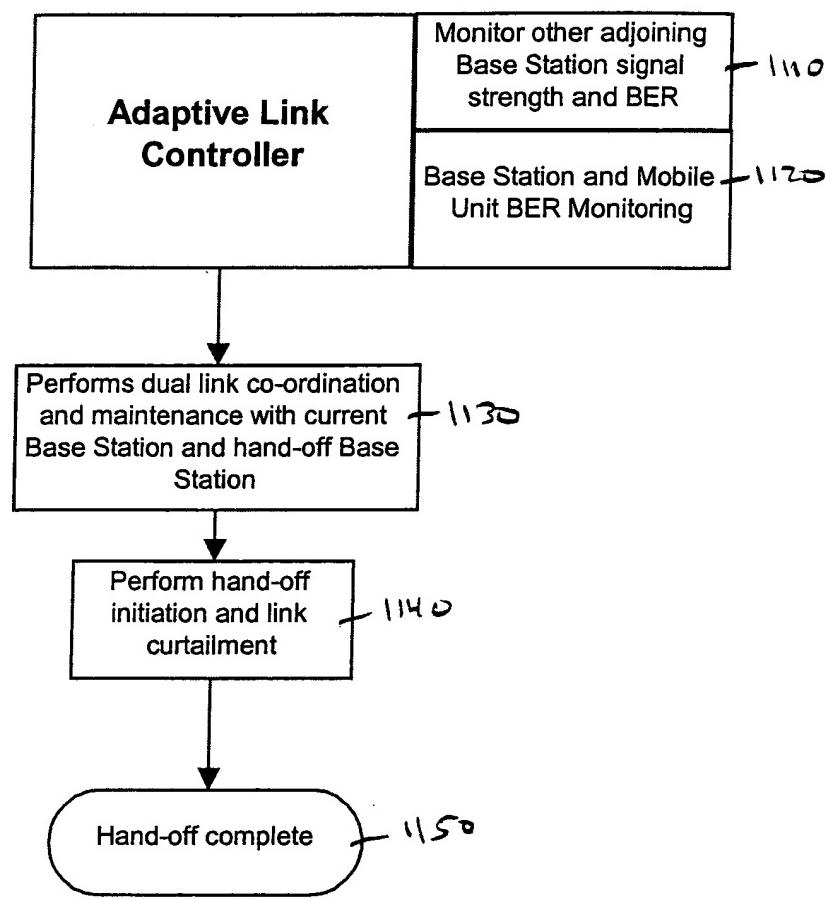


Fig 11 - Adaptive Link Controller